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ABSTRACT

An instructional system is presented for building the competencies of adult basic education students in making consumer decisions, and offers a guide to teachers who wish to design their own decision-making problems for students. The first four chapters provide a brief introduction, discuss the rational consumer decision-making process and the needed consumer decision-making competencies, and describe the model instructional system for teaching the decision-making competencies. Over half of the document is taken up by the final chapter, which presents the instructional model for decision making with suggestions for its use. The model, entitled "Buying a Used Car", presents four levels of instruction: (1) and (2), decision making on the "Can I afford it" level, supplemented by data cards; (3) realistic and complex "buy/don't buy" decision making, supplemented by data cards; (4) real-life decision-making situation of "buyer" and "seller," with no data cards. Instructions for teachers regarding the development of data cards are provided, and performance objectives, teaching strategies, and answer sheets are given. (LH)

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AN INSTRUCTIONAL SYSTEM

FOR CONSUMER DECISION-MAKING*

Teachers' Manual

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I. INTRODUCTION

Decision-Making is a basic survival skill. It could be argued that it is more fundamental and essential in daily life than the skills of reading or computation. People who are unable to make prudent decisions for themselves can only take action impulsively or depend on the decisions made by others. Neither of these alternatives is likely to serve the best interests of the individual. From a national or world view, a population of independent and rational decision-makers tends to hold in-check the forces of corruption in business and government. Thoughtful, analytical and decisive consumers, armed with the knowledge of what they want, what they can afford, and what they are getting for their money can do more for a nation's economy than a population of reckless spenders.

In Adult Basic Education, as in most other areas of education, decision making has been virtually ignored as a basic skill. People are taught how to compute compound interest, but not how to decide which of two cars to buy.

The art of decision-making is not inborn. It must be learned by experience. But people do not always learn by natural experiences, and too often learning by trial and error can produce mistakes that cost more than the lesson is worth. The safest and most effective means of learning to make decisions is through a process of training in which the learner becomes acquainted with decision-making in simulated life situations where it is possible to learn by doing and experimenting without risking the unhappy consequences of a bad decision. This manual and the research program from which it

came has as its overall purpose the introduction of effective training in decision-making into the ABE curriculum. To this end the manual provides the following tools and guidance to teachers:

1. An analysis of the decision-making process.
2. The identification of the knowledge and skills required for competent decision-making.
3. The description of a newly developed instructional system for teaching decision-making.
4. A complete set of materials for a set of decision-making problems, "Buying a Used Car".
5. A set of instructions for teachers who wish to design and administer their own decision-making problems.

II. RATIONAL CONSUMER DECISION-MAKING

The need to decide is the result of a conflict. When a person is confronted by alternative courses of action, it becomes necessary to select one path or the other. The conflict must be resolved before any rational action can be taken. It is not enough to be able to make a choice, any choice, simply to have the matter settled. Effective decision-making must lead to a good choice and by that we mean a choice that is consistent with reality (the facts of the matter) and with the values of the decision-maker.

The basic consumer decision can be reduced to the question: "To buy or not to buy?". If the answer is reached impulsively without information, without analysis, without weighing the present facts of the situation and the future probabilities, the decision is likely

to be a bad one in that it will produce unwanted results. The decision-maker will be more likely to buy when he should not or not buy when he should. Both kinds of errors can be reduced through a rational process of information gathering, analysis, and a general redirection of the complex elements in the choice to the simplest possible terms. The skill of decision-making is not in making the actual final choice, it is in the systematic gathering, preparing and transforming of information to a level of simplicity that enables a person to weigh opposing factors and arrive at a judgment. If all the factors point in the same direction, there is no problem, no real decision to be made. On the other hand, if there are many different factors, items of data all affecting the decision in different ways, it is at least initially impossible for the decision-maker to incorporate them rationally in his judgment. Consequently, he has less confidence in his decision and is unable to justify it in rational terms.

Rational consumer decisions are based upon four factors and their relationships to each other:

1. Resources

Expressed in monetary terms, this includes all those things of value which can be exchanged for goods and services. Cash on hand or in the bank, expected future income, assets that can be traded or sold for cash, credit, etc. Obviously when you are contemplating a purchase, your resources will determine what you can afford to buy. This is an essential category of information. It tells something

important about the buyer, regardless of what he is thinking of buying.

2. Costs

Expressed in monetary terms, this information pertains to a particular item under consideration for purchase. It includes the selling price, the tax, the cost of credit, (if an item is to be bought on time), the dollar value of all that must be paid out in exchange for the item. Cost tells something about the item's relative value, what people in general are willing to pay for it, or what the seller believes he can get for it.

3. Benefits

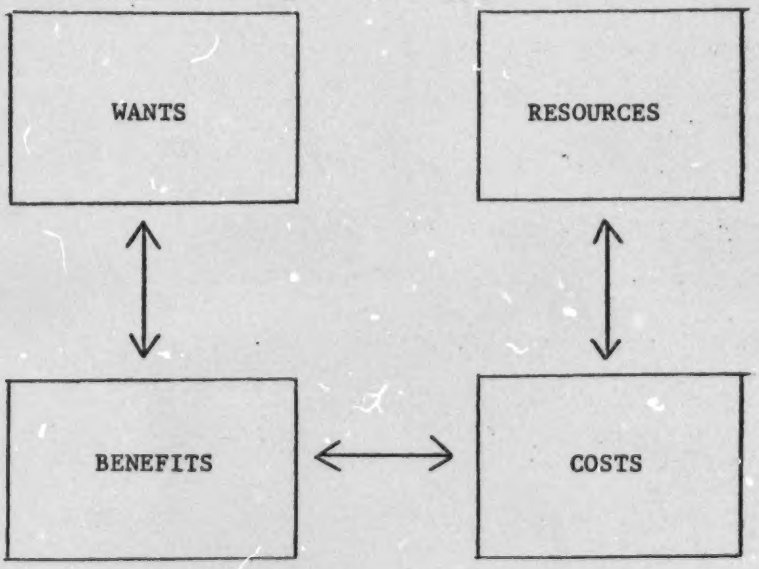
Expressed in terms of specific desirable or undesirable features of the item being considered, this information pertains to both the items being considered and the values of the prospective purchaser. If a person prefers large roomy cars he will regard this characteristic in a particular car as a benefit. The same type car may be seen as having no such benefit by another person with different values. The benefits in a particular car are in the eyes of the prospective buyer, not an intrinsic feature of the car.

4. Wants

Expressed in terms of general needs or desires, these pertain to the prospective buyer only. They represent his needs and desires. They determine what he regards as benefits (as explained above).

These four factors: Resources, Costs, Benefits and Wants can be represented in the following model which provides a framework for the collection and analysis of the information that is pertinent to any prospective purchase. A prospective purchase always involves a purchaser who has Wants and Resources and who is considering the the purchase of a specified item with specified Benefits at a specified Cost to the buyer. A prospective buyer may not have all the pertinent information for a prospective purchase, but to the extent that he is aware that he is lacking important information he can try to obtain it, or exercise caution in making his decision, or avoid making the purchase entirely.

DECISION-MAKING MODEL



R/C Axis: Can I afford it?
W/B Axis: Does it meet my needs?
C/B Axis: Is it worth the price?
R/C/B/W: Can I afford to be satisfied?

This framework identifies the four categories of information which are needed to make a decision. It serves as a guide to the identification and collection of data and for determining whether the essential data categories are represented.

Beyond the accumulation of data within each category, information can be further organized by analyzing pairs of categories. For example, the Resources-Cost Axis represents the relationship between how much a person has to spend and what an item costs. It determines whether or not a person can afford to make a particular purchase. This determination alone may resolve the decision-making conflict if the cost is too high for a person's means.

The Cost-Benefit Axis represents the cost of an item in relation to its benefits, from the buyer's point of view. Cost/Benefit is an increasingly popular term in government and business these days of economic strain. "Is an item worth its cost to me?" is a question every prospective purchaser must ask himself. The answer is found partly in the Wants of the buyer, and hence the benefits he sees in the item, and partly in the general demand for the item or what it is worth to others on the open market which affects the price.

This model is not intended to be used to teach decision-making in the abstract. It was originally used to analyze the collection and use of information in making consumer decisions. By reversing the process we have used the model to design consumer decision-making problems that give students the opportunity to gather and process information in preparation for making decisions. We are introducing the model here to provide greater comprehension of the factors involved in decision-making and to offer a guide to teachers who

wish to design their own decision-making problems for students.

The actual process of consumer decision-making is more a matter of preparing to make a decision than one of actually deciding. The preparation has three phases.

1. Gathering Information

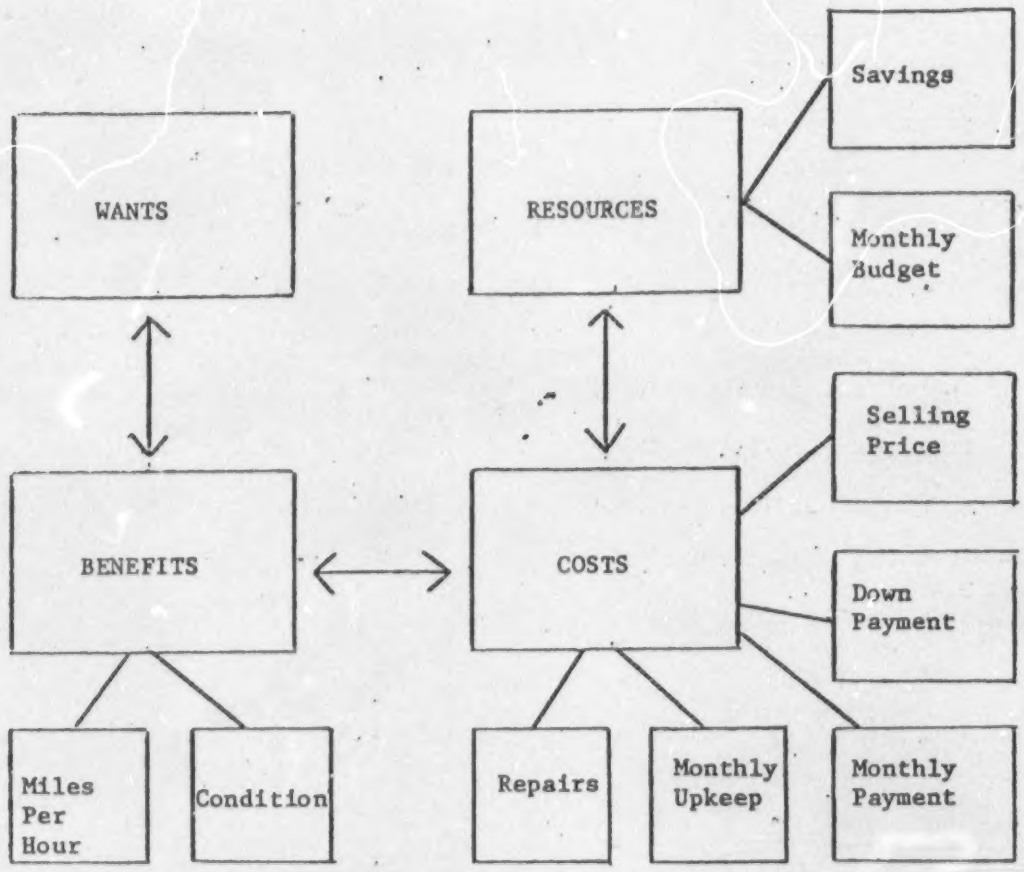
This is not a random activity. It is guided by a set of categories. The large main categories of the model - Wants, Resources, Costs and Benefits - apply to information gathering in all types of purchase decisions. They serve as a general guide. Each of these is supported by sub-categories that vary somewhat from one kind of purchase to another. The cost categories in buying a house, for example, are not identical with those of buying a car. The buyer must, therefore, become acquainted with the relevant and critical information sub-categories that pertain to the type of purchase he is preparing to make. For buying a used car on time the model, extended to include relevant sub-categories, might resemble the diagram on the next page. The buyer would then be using that particular set of sub-categories in gathering his information. The house buyer on the other hand would need additional sub-categories of information such as title search and termite inspection costs.

The information gathering phase is a critical one and an absolute prerequisite for the stages that follow.

2. Sorting Information

The more information a person has, the more complex the decision-making process becomes. The object of sorting information is to simplify it through classification. For example, all items of

DECISION-MAKING MODEL



cost should be brought together. The same for all resources, and benefits. Another type of classification is with respect to time. What are all the immediate costs at the time of purchase? What resources are on hand as opposed to those anticipated in the future?

3. Combining Information

The ultimate goal in preparing to make a purchase decision is to get the clearest overall picture of three relationships in order to answer three key questions.

a. The cost/resource relationship:

"Can I afford this item?"

b. The cost/benefit relationship:

"Is the item worth the cost to me?"

c. The wants/benefit relationship:

"Does the item meet my needs?"

The rational justification of any decision to buy or not to buy should be made in those terms. The answer to all three questions should be "yes", if a rational purchase decision is to be made. The third phase in preparing to make a decision calls for the combination and processing of data to the point where these questions can be answered.

Making decisions, particularly major ones, is typically fraught with doubts and uncertainties. It is painful to be pulled in two directions at the same time and to have no dependable system for resolving the conflict. The typical reaction of the untrained consumer is to get out of the situation as quickly as possible. Assuming that no decision is a decision, the person without a rational process

for deciding generally escapes through blind impulse or by relegating the choice to another person. Under these circumstances the odds are against a happy ending.

The instructional system described in this manual is designed to help the student develop a system of information gathering and processing so as to buttress himself cognitively against the emotional forces that are inherent in all forms of conflict resolution.

III. CONSUMER DECISION-MAKING COMPETENCE

As we have stated before, the competence of a consumer decision-maker lies in his ability to prepare for a decision. The better the preparation, the more rational the decision. Rational decisions are based on knowledge of one's own wants and/or needs and knowledge of the facts of the situation. One must know how to obtain these facts and interpret them. There are four kinds of competence that a consumer decision-maker must have.

1. General skills for generating, organizing, and interpreting information.
2. General knowledge of the main categories of information that apply to the analysis of any purchase situation.
3. Specific knowledge of the categories of information that apply to the analysis of particular purchase situations (e.g., buying a car).
4. Skill in performing a purchase analysis and in interpreting the results.

A. General Skills for Generating, Organizing and Interpreting Information

1. Data Collection entails using categories to search for or generate data. If you need to know how much you have in savings, you must know what categories that includes and how to get the data. Does savings include: Money in the bank? Cash in the dresser drawer? Money your friend owes you? The ability to conceptualize a category and use it to guide data collection is a basic tool that applies to many cognitive activies.

2. Data Sorting entails the classification of data already collected. It is similar but more complex than simple data collection. It enables a person to transform a disorganized array of data into a more meaningful and usable pattern.

3. Data Processing entails the transformation of data to a simpler form that lends itself more to interpretation. Arithmetic is one common form of data processing. For example, the car you want to buy has a selling price, a state sales tax, and some immediate repairs to be made. They are all items of initial cost. By adding the items, you can generate a total initial cost figure, which for certain purposes is more useful than the separate cost figures.

Information processing is not always mathematical. Car A is slightly more expensive than Car B. In the buyer's eyes it is far more desirable than Car B. You may have no mathematical way to express this desirability, but you feel that Car A is a much better buy than Car B even if it is more expensive. This is intuitive information processing rather than mathematical. It is a more

subtle skill than the latter. By transforming the information you have on each car into an estimate of how good a "buy" you think it is, you can then compare them in these terms. This greatly aids decision-making. This skill has application far beyond consumer decision-making.

4. Data Interpretation is the final step before decision-making. It is the judgment that bridges the gap between data collected and processed, and the conclusion to be drawn. It takes less skill to decide whether you have enough money to cover the initial costs of buying a particular car, than it does to decide whether or not, six months from now, you will be glad you bought Car A instead of Car B. The skill of interpretation is a sophisticated one that grows with experience.

B. General Knowledge of Main Categories of Information that Apply to the Analysis of Any Purchase Situation

A purchase situation is the set of circumstances that calls for a buy/don't buy decision. The preparation for making such a decision requires an analysis of the situation. The broad general categories for such an analysis are those represented in the model in Section II of this manual.

Two of the categories pertain to the potential buyer, his wants and his resources; and two pertain to the item under consideration for purchase, its benefits and its costs.

Competence in making a purchase analysis not only requires comprehension of these categories and the kinds of information they

represent, but also the significance of the relationships among them. We refer here to the three axes illustrated in Section II and the questions they represent.

1. Is this item what I want? (Wants/Benefits)
2. Can I afford it? (Cost/Resources)
3. Is it worth the price to me? (Cost/Benefit)

Finding answers to these three questions should be recognized as the ultimate goal of the purchase analysis. All data gathering should be aimed at obtaining information for each of the categories and the sorting and processing of data should be seen as the means by which the data can be refined to the point that meaningful comparisons can be made. The competent decision-maker may not consciously follow these steps in some mechanical fashion. But he must, if reality is to be represented in the decision, obtain and use information from all four categories in arriving at a judgment. It is inconceivable that a person could make a satisfactory decision about a car (except by accident) without knowledge of his wants and resources, and the car's benefits and costs.

C. Specific Knowledge of the Categories of Information That Apply to the Analysis of Particular Purchase Situations

Whereas all purchases analyses have four general information categories in common, the specific data appropriate to these categories vary considerably from one type of purchase to another. The purchase analysis for buying a pencil demands vastly different data from one for buying life insurance. Consider for a moment

the respective data on wants, resources, costs, and benefits that would be required in these two cases. Pencils are ordinarily paid for in cash and vary only slightly from one brand to the next in regard to costs and benefits. The wants that prompt the purchase are fairly standard and constant. The range of possible benefits alone in life insurance policies could fill pages if not books. The point is that the competence of the consumer decision-maker must include specific knowledge of all the data categories that are relevant and critical in the purchase decision he is preparing to make. This means that as competent consumers we must not only become generalists in the preparation process, we must become specialists at least in regard to what categories of data are important. We don't need to have all the answers, but we must be prepared to ask the right questions.

D. Skill in Performing a Purchase Analysis and in Interpreting the Results

This is the overall skill that includes all of the operations described above and culminates in the ultimate "buy/don't buy" decision. It is only by comprehending what information is needed in the final stage of preparation that a person can intelligently collect and process information at the earlier stages.

IV. AN INSTRUCTIONAL SYSTEM FOR CONSUMER DECISION-MAKING

The prime objective of this project has been to develop a workable instructional system for building the competencies of ABE students in making consumer decisions. We selected the instructional system goal rather than merely a staff development goal for the following reasons: (1) ABE teachers have consistently expressed a preference for a well developed and tested system of instruction with ready-made (or easily made) materials rather than a philosophy/theory approach that leaves material and program development up to the individual teacher. (2) Previous attempts in this project to provide teachers and administrators with insights and methodology designed to help them learn to employ a problem-solving approach to ABE produced a marked level of insight and interest but little evidence of "fall out" in the form of new staff development programs or changes in ABE instruction. (3) HumRRO has specialized in developing performance oriented instructional systems for adult students in the Armed Forces and in business and industry. In the course of this work we have evolved a set of instructional principles and techniques that have proved to be effective in a wide range of teaching/learning situations.

A. Assumptions About Learning

The following assumptions about learning have served as our main rationale in developing the instructional system:

1. Learning is an active process. People learn by doing rather than by absorbing.

2. Learning is an interactive process. The learner takes action in the context of an environment. He acts upon the environment and the environment reacts. The action and the reaction are experienced by the learner as a whole pattern.

3. Learning is an individualistic process. Each person has a unique style or strategy of learning. Each responds in his own way to the environment. Each has prior experiences, concepts and beliefs that influence what and how he learns.

4. Learning is fundamentally a self-directed process. If the learner has a clear goal, well-defined boundaries, and access to needed resources, learning will be more efficient and effective to the degree that the process is under the control of the learner himself and protected from excessive intervention by others.

5. Learning that is self-directed tends also to be self-motivated, that is, the process of learning is sufficiently rewarding in itself to make other forms of motivation unnecessary

6. The learning process tends to move most effectively from the concrete toward the abstract and from the particular toward the general.

B. Instructional Principles

The following principles based upon the previsouly stated assumptions and widely tested in a variety of teaching/learning situations were adapted in the design of this instructional system.

1. Performance-Based Instruction: An action is best learned through performance. Instruction is best applied in relation to performance. Learning goals and objectives are best expressed in terms of performance.

2. Absolute Criterion: Performance goals and standards are best expressed in absolute terms. A problem is either solved or not solved. There is no middle ground.

3. Feedback: Performance is improved if the learner gains immediate knowledge of the effects of his actions.

4. Functional Context: The student best acquires skills in the context in which they are to be performed. Theoretical and abstract inputs are most effectively made in the context of skill acquisition and practice.

5. Individualization: Instruction is most effective when it is adapted to the individual learner. Learning is best adapted to the learner if it is self-directed.

6. Open Access to Learning Resources: Learners tend to make the best use of resources when they have open access to them and are free to use them autonomously.

C. Problem Solving

We decided that the most effective application of the above principles could be made through a problem-solving approach. Figure 1 illustrates how this differs from the extremes of traditional training and independent investigation. The former offers little or no autonomy to the learner. All the decisions are made by the teacher. The learner has no opportunity to experiment or try out

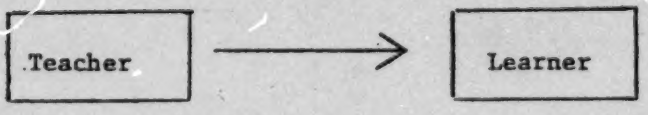
Figure 1

PROBLEM-SOLVING:

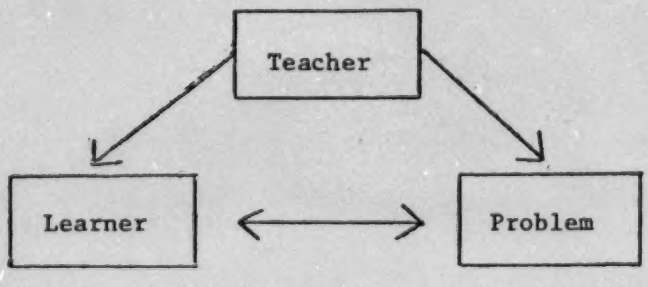
A NEW STUDENT-TEACHER RELATIONSHIP

Learning Mode	Who Sets Goal?	Who Prescribes Means?
Traditional Training	Instructor	Instructor
Problem Solving	Instructor	Learner
Independent Investigation	Learner	Learner

CONVENTIONAL INSTRUCTION



PROBLEM-SOLVING



his own ideas. Independent investigation leaves the learner to set his own goals depriving him of the potential guidance and focussing derived from teacher-designed goals.

Problem-solving provides desirable features of conventional training and independent investigation. The teacher sets the goals based upon well defined learning objectives, but the student is encouraged to reach the goals through his own ingenuity. The teacher sees that necessary materials and other resources are provided. He responds to requests for help. He provides feedback to help the student determine his own progress vis-a-vis the goal. The learner is truly "in the driver's seat" but he does not need to be there all alone if he does not want to.

The diagrams at the bottom of Figure 1 compare the teacher's roles in conventional instruction and in problem-solving. In the former it is a one-way delivery system of directions and information. Student actions are always only at the teacher's bidding. In problem-solving, the student is constantly interacting with the problem, trying to find a solution. The teacher intervenes to help the student, when he asks for help, or to modify the problem to set new goals or to add new resources, or in some way to make it easier or more difficult as the student's needs indicate.

Problem-solving takes the pressure off the student to "be right" the first time. If he has not solved the problem he keeps at it until he does. He is never in the position of having failed unless he quits. There is never an inducement or pressure to give up. There is no embarrassment in asking for help.

Problem-solving can and often does lead to independent investigation in which the student starts setting his own goals and solving problems he has identified for himself. As you will see, this is built into the instructional system.

D. Summary of Problem-Solving

To summarize, the chief characteristics of problem-solving are:

1. The learner is given a series of clear and concrete short-term goals which he must fully understand and accept so that he can know at once when he has reached each goal.

2. The learner is provided with the necessary time, space, materials and other resources he is likely to require in his attempts to reach each goal.

3. The learner is free to pursue each goal any way he wishes (within certain limits).

4. The teacher assumes the following roles:

   a. He sets the short-term goals for, and in consultation with, each learner. These may be the learner's own goals, depending on the learner's ability to set appropriate short-term goals for himself.

   b. He clarifies each goal for the learner.

   c. He provides all required resources for the problem-solving process.

   d. He organizes the learning environment.

   e. He establishes the operational procedures for the problem-solving activities.

f. He assures that the learner is able to obtain all necessary feedback.

g. He observes learner progress and offers assistance when it is needed or requested.

h. He assures that the learner has mastered each goal before the learner proceeds to the next.

E. Instructional System Design

The instructional system for decision-making as developed in this project is organized as a series of problems to be solved either by the individual student or by pairs or small groups. They are given cards which contain the necessary data, one item of data per card. The goal in each case is to organize and process the data and make a decision about buying or renting the item in question and to justify the "buy/don't buy" decision in terms of data analysis. The problems are sequenced in order of increasing levels of difficulty. In Level I problems the student receives a deck of cards which cover all the relevant data for answering the question: "Can I afford this item?". The deck includes data on the buyer's money resources and on the cost of the item in question. Benefits are not included at this level. The assumption that the buyer wants to buy the item is made explicit.

Level I problems are purely mathematical. The buyer has to group his resources and costs appropriately and perform the necessary arithmetic. Some difficulty may be encountered in the fact that some costs are immediate at the time of purchase (e.g., down payment) and others are periodic (e.g., monthly payments). The same is true

of resources (e.g., cash reserve vs. anticipated available income).

The students work with the cards until they arrive at a decision as to whether or not they can afford to buy the item. They also should have a rationale to support the decision. The rationale consists of the relevant data organized, processed and interpreted. The teacher is called in to hear the decision and the rationale. If the data collection or analysis has been inadequate or incorrect the teacher can help the student immediately to recognize the problem and correct it. Ordinarily a series of decision-making problems is given at Level I until the students have mastered the cost/resources portion of purchase analysis. The student gets practice in data sorting, processing, and interpreting. Because he is given cards containing all the necessary data for making the "Can I afford it?" decision he is introduced to the categories of relevant data he will need to use later when he has to gather his own data at Level IV and in simulated real-life situations.

Level II problems are introduced when the student has learned enough about buying a particular kind of item to know all the relevant and critical financial data categories. A new deck of data cards is presented to each student or team. This deck contains all the financial data categories (resource and costs data) as in Level I plus several additional cards containing benefit items (e.g., "This car is air-conditioned."). The cards are presented face down and the student is instructed to turn up a certain number of cards at random and leave the rest. The decision is still in the "Can I afford?" realm. The difficulty is encountered when the student

finds that he lacks certain critical information which prevents him from making a rational decision. After consulting with the teacher and reporting his difficulty he is instructed to turn up one of the face-down cards, and once more he tries to make a decision. He proceeds in this manner until all the necessary financial data have been made available and the decision and its rationale have been formulated and checked. The elimination of some data cards is a technique called "fading" which is used to help the student discover what data are critical for making the "Can I afford it?" decision. The addition of benefit cards introduces two new dimensions for decision-making: the Wants/Benefits Axis (Does it meet my needs?) and the Cost/Benefit Axis (Does it seem like a good buy?). The student may now refuse to buy a car he can afford perhaps because he does not want one that is scratched and dented and cannot afford to have it fixed, or because the price seems too high for a car that old. Whatever the decision, as in Level I the student is expected to have a data-supported rationale.

Level III problems are still more realistic and complex. The "buy/don't buy" decision involves two purchase items instead of one and the student must decide between them. The cards he receives are of three different colors. The white cards provide personal financial data about the buyer: savings, expected income not already committed to some other purpose, etc.

Blue cards contain cost and benefit data on one of the purchase items, and yellow cards provide the corresponding data on the other item. The goal, as before, is to analyze the data, make the decision

and provide a rationale based upon the three axes:

Wants/Benefits

Cost/Resources

Cost/Benefits

Level III is difficult largely because it requires the simultaneous processing of quantitative and qualitative data. When benefits cannot be represented by numbers, generating a cost/benefit ratio requires a fairly subtle and sophisticated judgment skill. Comparing two purchase items in terms of their respective cost/benefit ratios requires practice and experience of the kind provided by the Level III problems.

Level IV simulates actual real-life situations. Data cards are not used. One student assumes the "buyer" role and another is the "seller". The former is given data pertaining to his own financial status, i.e. his financial resources, and the "seller" is given the cost and benefit data for the item or items he is selling. In this way the buyer is given no purchase item data but he may request the data he wants from the seller, category by category. The exchange between the buyer and seller roughly approximates the circumstances under which most complex purchases are negotiated. In order to obtain the information he needs, the buyer must know the relevant and critical data categories and use these as a guide to asking the seller questions. The seller may offer certain data gratuitously ("Look how low the down payment is!") but not volunteer the fact that the monthly payments are very high. The concept of "caveat emptor" soon becomes clearly understood.

Level IV problems can be left completely unstructured by the teacher. The seller can invent all of his own purchase item data and the buyer can establish his own wants and resources. When students get to the point where they can set their own problem goal and means they have moved from problem-solving to independent investigation.

The role of the teacher throughout this instructional system is that of establishing and maintaining the conditions for problem-solving, checking the analytical work of the students, providing feedback to the students on their performance, and providing help and guidance as needed.

V. INSTRUCTIONS

This is a set of problems for you to solve. They have to do with buying an imaginary used car. The object is to make the best possible decisions about buying the cars in the problems. For example, if you can not afford a particular car, it would not be a good decision buy it. If you are deciding between two cars and you can afford both of them, the best decision would be to buy the one that gives you the most of what you want for the least money. Whenever you make a decision, you should be able to explain why.

In order to make good decisions you will need information. This will be given to you on data cards. You will receive a new deck of cards for each problem. The idea is to learn how to use information to prepare yourself to make good decisions. These problems will give you practice in doing this.

The problems are arranged in four levels of difficulty. Each level has its own instructions. Be sure you understand the instructions before you begin to work with the cards.

A. DIRECTIONS FOR THE DECISION-MAKING PROBLEM

Buying a Used Car

Level I

1. Take the I-A packet of cards from the envelope labeled Level I-A.

2. This deck of cards contains information on:

   a. Your resources (savings, monthly budget)

   b. The terms of the sale and other costs of a car (needed repairs, down payment, monthly payments, etc.)

3. If you have questions concerning the cards, page 2 may help clarify them.

4. Assume that you have been looking at this car and you like it.

5. Can you afford to buy this car, assuming you have the resources given on the cards?

6. Why or why not?

7. If you need help to solve the problem, refer to "Helpful Teaching Strategies", page 45.

8. Check the answer sheet coded I-A to see if you made a good decision. (page 36)

9. When you have correctly soved Problem I-A, try Deck I-B, using the same instructions. Check the answer sheet coded I-B to see if you made a good decision. Then do Problem I-C and check you decision as before.

Move on to Level II

The Cards

1.	Savings	Amount of money you have saved, and have access to immediately. Cash on hand.
2.	Monthly Budget	Amount per month you have allocated for car expenses out of your budget (after rent, food, bills, etc.). You do not have to spend it all, but it is available on a monthly basis.
3.	Monthly Upkeep	An average amount that you will need per month for upkeep and maintenance.
4.	Monthly Payment	Payment due per month for 36 months.
5.	Down Payment	Payment due immediately upon purchase, if car is financed.
6.	Repairs	Critical repairs that must be made immediately (before driving the car). Therefore, repairs, like the down payment, would have to come out of cash on hand.
7.	Selling Price	Price the seller asks (before taxes, insurance, interest, license fees, etc.).
*8.	(Benefit) This car has a quiet ride.	Information on the possible benefits or side effects of a car that may influence your decision.
*	This car has been driven 97,000 miles.	

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* Levels II and III only.

Level II

1. Take the II-A packet of cards from the envelope labeled Level II-A.

2. Without reading them, place the cards face down on the table so that the code numbers show.

3. Turn any five cards face up.

4. The three extra cards should remain face down. Do not look at them.

5. Assume that this is a car you are interested in.

6. Using the face-up cards, do you have enough information to determine if you can afford to buy it?

7. If so, can you afford to buy it?

8. If not, what information is missing?

9. Once you have made a decision, turn over the remaining cards.

10. Can you afford the car now? Did you make a good decision? Why or why not?

11. When you have correctly solved Problem II-A, try Deck II-B. This time turn over any four cards, then follow the same instructions as in II-A.

12. Next try Deck II-C, turning over three cards, and following the same instructions as before.

Move on to Level III

Level III

1. Take the III-A packet of cards from the envelope labeled Level III-A.

   In this problem you are to decide which of two cars to buy. Or you may decide to buy neither. As before, you should have an explanation for whatever decision you make.

2. The white cards provide information about your financial status.

3. The yellow cards provide information about one car. The blue cards provide information about the other car.

4. Assume that in general you like both cars.

5. Which one would you decide to buy?

6. Explain your decision.

7. Check the answer sheet coded III-A to see if you made a good decision. (page 42)

8. When you have correctly solved Problem III-A, try Deck III-B, using the same instructions. Check the answer sheet coded III-B to see if you made a good decision. Do the same with Problem III-C.

Move on to Level IV

Level IV

This problem requires two people to play roles: a car buyer and a car dealer. The object is to enact a situation in which the buyer obtains information from the seller by asking for specific categories of data about the car for sale. The buyer will then made the decision whether to purchase or not.

The cards in the envelope are all blank.

Find a partner and decide who will be the buyer and who will be the seller. After completion of the problem, the buyer and seller should switch roles.

Instructions for the Buyer

1. The buyer fills out data cards that specify his resources (cash in the bank, monthly budget).
2. The buyer asks the seller questions about the costs of the car for sale. The seller gives only the information asked for by the buyer.
3. This data is recorded on the blank file cards.
4. The buyer decides when to terminate the interview.
5. Using the data cards, the buyer then prepares to make his decision as to whether he can afford the car and, if he can afford it, whether or not he would buy it.
6. As in the previous problem, the buyer would explain his decision.

Instructions for the Seller

1. The buyer already has the information on his personal resources. The seller responds only to direct inquiries about the cost of the car or benefits.
2. The seller will need to improvise answers to the buyer's questions. Try to make answers as realistic as possible.

3. The seller provides only specific answers to the buyer's questions. Do not provide any additional information.

4. The interview stops when the buyer feels he has all the needed information.

When you complete Levels I - IV of the problem, review the performance objective checksheet (page 33). This checksheet should be used by teachers to check student mastery of any decision-making problems.

You (as the student) should have mastered each of the four Level's performance objectives in the "Used Car" problem.

PERFORMANCE OBJECTIVE CHECKSHEET

I. Level I

___ A. Student should correctly answer the question:

"Can you (afford to) _____?"

(buy this car, live on this budget, rent this apartment, etc.)

___ B. Student should give a logical rationale for his decision.

(Meet the teacher's standard for acceptability.)

II. Level II

___ A. Student should state inability to make an affirmative decision when cost/resource information is missing.

___ B. Student should specify category of information that is missing (example - down payment).

___ C. Student should correctly answer the question:

"Can you (afford to) _____?"

(buy this car, rent this apartment, live on this budget, etc., when all cost/resource information is present.)

___ D. Student should give a logical rationale for his decision.

III. Level III

___ A. Student should correctly answer the question:

"Which of these two would you _____?"

(buy, rent, be able to budget, etc.)

___ B. Student should give a logical rationale for his decision.*

* Note: Any decision based on a student's values which is financially feasible is acceptable.

IV. Level IV

___ A. Student should correctly answer the question:

"Can you afford to _____?"

(buy, rent, budget, etc.)

___ B. Student should give a logical rationale for his decision.

___ C. If the student can afford, he should answer the question:

"Would you _____?" (buy, rent, budget, etc.)

___ D. Student should give a logical rationale for his decision.

Formulas

In order to afford the initial costs of the car, the down payment plus the repairs must be less than or equal to your savings.

$$DP + R \leq S$$

In order to afford the estimated* costs over time of the car, the monthly upkeep plus the monthly car payment must be less than or equal to your monthly budget.

$$MU + MP \leq MB$$

* If $DP + R > S$, you can not afford the car.

** If $MU + MP > MB$, you can not afford the car.

ANSWER SHEET

Level I-A

The correct response would be that you can afford the car.

	Your Resources	Car Costs
Initial	Savings = $295.00	Down Payment = $160.00 Repairs + 75.00 $235.00 DP + R < S
Over Time	Monthly Budget = $77.00	Monthly Upkeep $20.00 Monthly Payment +55.00 $75.00 MU + MP < MB

Selling Price = $1,600.00

ANSWER SHEET

Level I-B

The correct response would be that you can not afford the car, initially, or over time.

	Your Resources	Car Costs
Initial	Savings = $125.00	Down Payment = $ 65.00 Repairs +150.00 $215.00 DP + R > S
Over Time	Monthly Budget = $40	Monthly Upkeep = $28.00 Monthly Payment + 29.00 $57.00 MU + MP > MB

Selling Price = $650.00

ANSWER SHEET

Level I-C

The correct response would be that you can afford the car, initially and over time, or by paying cash. If you paid cash, you could cover the $50 repair bill with your allocated Monthly Budget.

	Your Resources	Car Costs
Initial	Savings = $650.00	Down Payment $ 60.00 Repairs +50.00 $110.00 DP + R < S
Over Time	Monthly Budget = $55.00	Monthly Upkeep $20.00 Monthly Payment +35.00 $55.00 MU + MP = MB

Selling Price = $649.99

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ANSWER SHEET

Level II-A

The correct response would be that you can afford the car, even if it appears that you can't cover the initial costs. Your Monthly Budget surplus is $23.00. With that, you could afford the $20.00 repairs that you lack initially.

	Your Resources	Car Costs
Initial	Savings = 0	Down Payment = $ 0.00 Repairs = + 20.00 $20.00 DP + R > S
Over Time	Monthly Budget = $85.00 (surplus of $23.00)	Monthly Upkeep $22.00 Monthly Payment +40.00 $62.00 MU + MP < MB

Selling Price = $1,029.00

Benefits

Gets 24 miles per gallon.

Top speed is 90 mph.

Body in excellent condition.

ANSWER SHEET

Level II-B

The correct response would be that you can not afford the car this month.

	Your Resources	Car Costs
Initial	Savings = $100.00	Down Payment $ 60.00 Repairs +60.00 $120.00 DP + R > S
Over Time	Monthly Budget = $65.00	Monthly Upkeep = $28.00 +30.00 $58.00 MU + MP < MB

Selling Price = $650.00

Benefits

Needs premium gas.

Has a quiet ride.

Has few dents or scratches.

ANSWER SHEET

Level II-C

The correct response would be that you can not afford the car, even if it appears that you can cover costs over time with your Savings surplus ($30.00). You only have enough to cover three months of car payments with your surplus.

	Your Resources	Car Costs
Initial	Savings = $75.00 (surplus of $30.00)	Down Payment $45.00 Repairs 0.00 $45.00 DP + R < S
Over Time	Monthly Budget = $30.00	Monthly Upkeep $19.00 Monthly Payment +19.00 $38.00 MU + MP > MB

Selling Price = $450.00

Benefits

Rough ride.

Needs new paint.

Gets 18 miles per gallon.

ANSWER SHEET

Level III-A

You can not afford to buy Car A.

Car A

	Your Resources	Car Costs
Initial	Savings = $325.00	D. Paymnt 160 Repairs +35 $195 DP + R < S
Over Time	Monthly Budget = $85.00	M. Upkeep $26 M. Paymnt +17 $103 MU + MP > MB

Selling Price = $1,900.00

Benefits

This car has a stereo tape player.

This car has a noisy ride.

This car has perfect upholstery.

You can afford to buy Car B.

Car B

	Your Resources	Car Costs
Initial	Savings = $325.00	D. Paymnt 110 Repairs +200 $300 DP + R < S
Over Time	Monthly Budget = $85.00	M. Upkeep 18 M. Paymnt +47 $65 MU + MP < MB

Selling Price = $1,100.00

Benefits

This car has no tape player.

This car has a quiet ride.

This car has slightly worn upholstery.

ANSWER SHEET

Level III-B

You can afford to buy this car.

Your decision will reflect your value preferences.

Car A

	Your Resources	Car Costs
Initial	Savings = $450.00	D. Paymnt 100 Repairs +300 $400 DP + R < S
Over Time	Monthly Budget = $90	M. Upkeep $32 M. Paymnt 50 $82 MU + MP < MB

Selling Price = $1,900.00

Benefits

This car has dents and scratches

This car has a top speed of 120 mph.

This car gets as miles per gallon.

You can afford to buy this car.

Car B

	Your Resources	Car Costs
Initial	Savings = $450.00	D. Paymnt 350 + 5 $405 DP + R < S
Over Time	Monthly Budget = $90	M. Upkeep $21 M. Paymnt 65 $86 MU + MP < MB

Selling Price = $2,690.00

Benefits

This car is in perfect condition.

This car has a top speed of 100 mph.

This car gets 20 miles per gallon.

ANSWER SHEET

Level III-C

You can not afford to buy this car.

You can not afford to buy this car this month.

Car A

	Your Resources	Car Costs
Initial	Savings = $30	D. Paymnt 0 Repairs +0 0 DP + R < S
Over Time	Monthly Budget = $140	M. Upkeep 30 M. Paymnt +115 $145 MU + MP > MB

Selling Price = $2,999.00

Benefits

This car is 1 year old

This car requires premium gas.

This car gets 18 miles per gallon.

Car B

	Your Resources	Car Costs
Initial	Savings = $30.00	D. Paymnt 0 Repairs +120 $120 DP + R > S
Over Time	Monthly Budget = $140	M. Upkeep 20 M. Paymnt +65 $85 MU + MP < MB

Selling Price = $1,500.00

Benefits

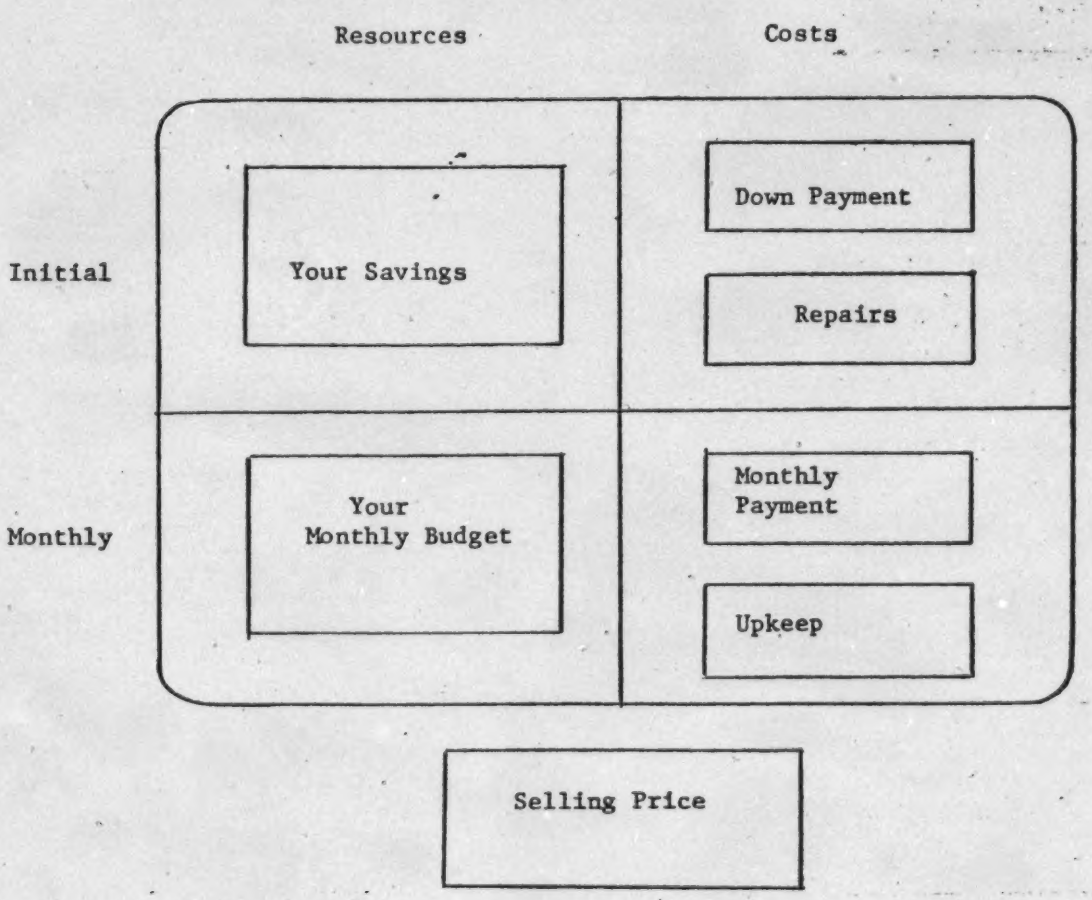
This car is 4 years old.

This car uses regular gas.

This car gets 29 miles per gallon.

Helpful Teaching Strategies

We have found that students are able to solve the problem more readily when they sort the cards by (a) personal resources vs. costs, and (b) initial vs. monthly cash outlay. The example below shows the physical layout of the "Used Car" problem cards, using the above strategy.



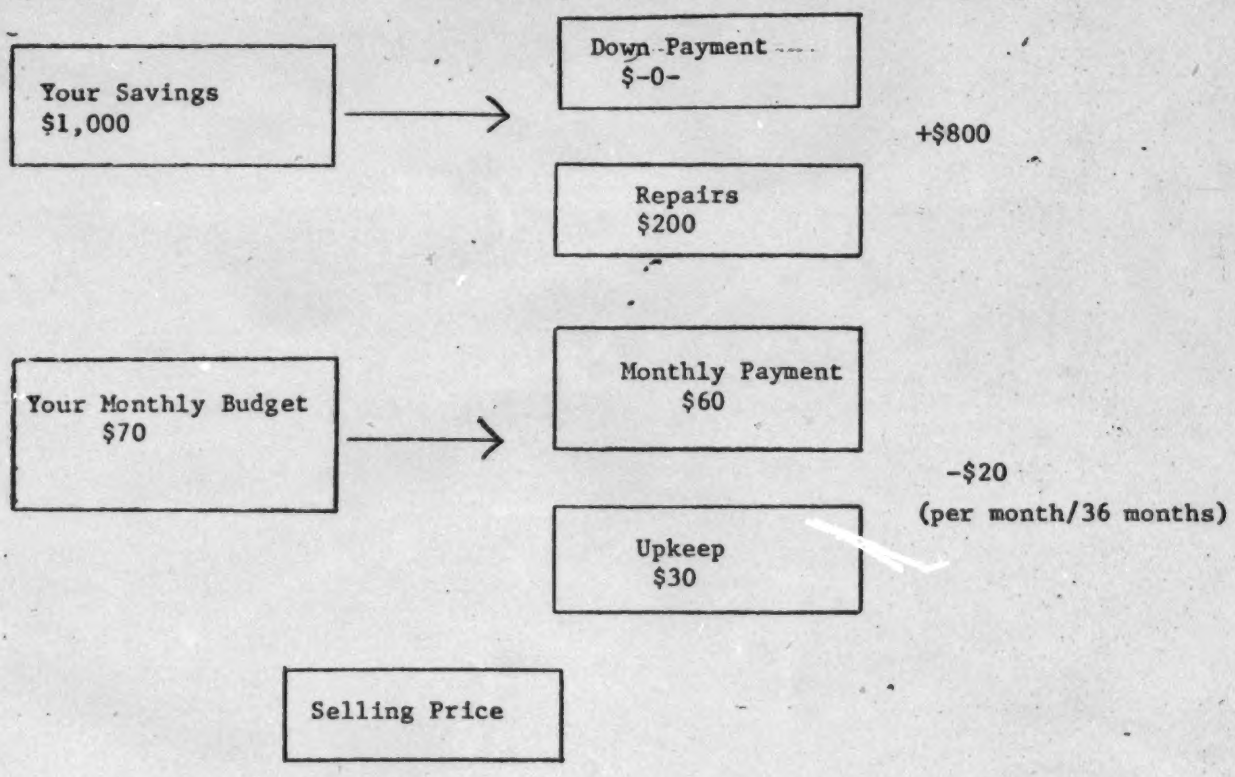
Formulas: In order to answer the question: "Can you afford?", the following formulas must be applied.

Down Payment + Repairs $\leq$ Savings

Monthly Payment + Upkeep $\leq$ Monthly Budget.

Exceptions to Formulas

1. Occasionally a card deck will have some subleties that a teacher may notice while hearing the student's rationale. For instance, a student will be able to afford an item if he supplements a deficit monthly amount with surplus savings. For example:

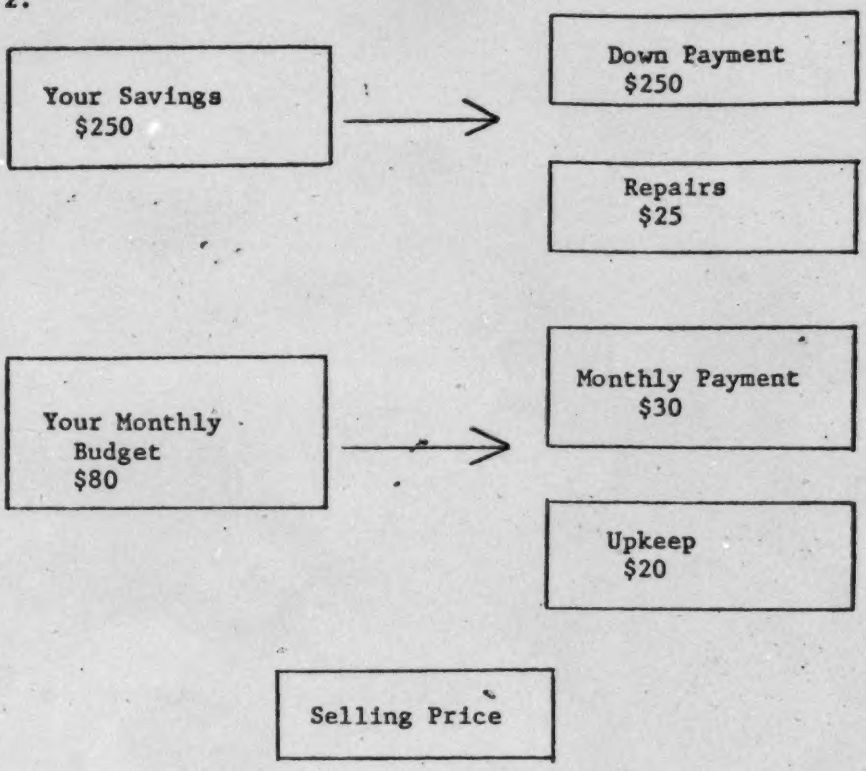


Explanation

The student's monthly budget would be $20 short for 36 months ($720 total deficit). However, with the surplus savings, he could afford the monthly payments and upkeep costs.

We do not require that a student initially see these subleties. An acceptable answer to this problem would be that the student CAN NOT afford the item. (Upkeep + Monthly Payment > Monthly Budget). The teacher may want to point out alternative strategies in similar problems. ("Could you afford it if you borrowed from your savings?")

2.



In this problem, an acceptable answer would be that the student CAN NOT afford the car. (Down Payment + Repairs > Savings).

However, if the student applied his monthly budget surplus ($30) to the savings he had, he would be able to afford the initial costs: down payment and repairs. Thus, he could afford the item. The teacher might point out alternative strategies in such cases. ("Could you afford it if you looked again at your monthly money?")

Acceptable vs. Unacceptable Rationales

1. Any financially consistent and logical rationale given by students in answer to the question: "Can you afford _____?" (rent, buy, etc.) is acceptable. (See "Formulas")*

2. When dealing with "benefit" (financially superfluous) cards, any reasonable student response to the question: "If you can afford, would you _____?" (buy, rent, budget, etc.) is acceptable, IF consistent with the financial nature of the cards presented.

For example:

A student may reject buying an item because a benefit card says: "This item is dented." when he can afford it. However, stating that he would buy an item because it had no dents when he can't afford it would be unacceptable.

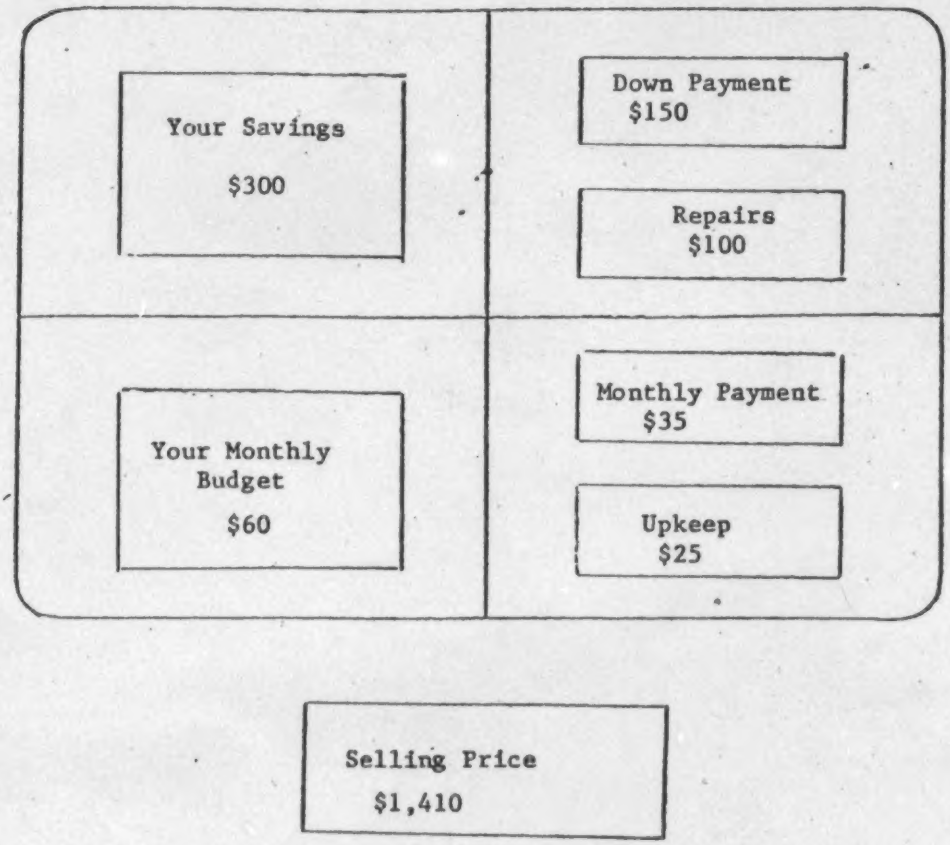
* Imaginative reponses should meet the teacher's criteria for acceptability. ("I can't afford the item now, but in two months I could save the extra $50 if I worked a few hours overtime".) In this situation the student does recognize that he can not presently afford the car, thus he meets performance criteria.

Acceptable vs. Unacceptable

Student Rationales

Examples:

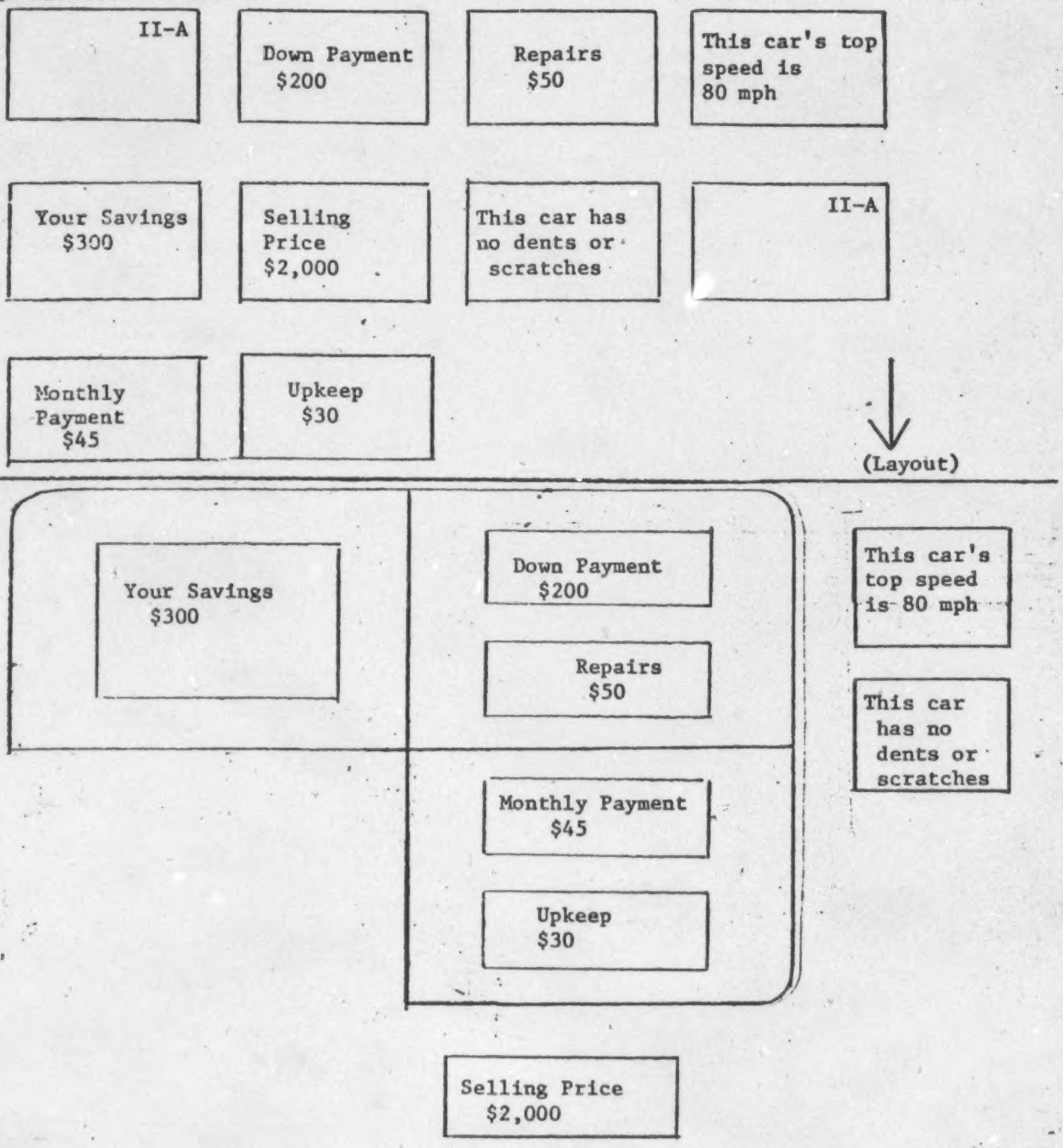
1. Level I - Example:



Acceptable
Rationale: I can buy the item. I have enough monthly to afford upkeep and the monthly payment. I have enough saved to cover repairs and down payment.

Unacceptable
Rationale: I can't buy the item. It's too expensive. The payment is too high. It's too cheap, etc.

2. Level II - Example



Acceptable: Any decision based on all the information within the financial constraints.

I can't buy it - I don't know how much money I have.

I don't know if I can buy it, my budget's missing.

Unacceptable: Any decision to buy disregarding the fact that information is missing.

I can buy it. It's cheap.

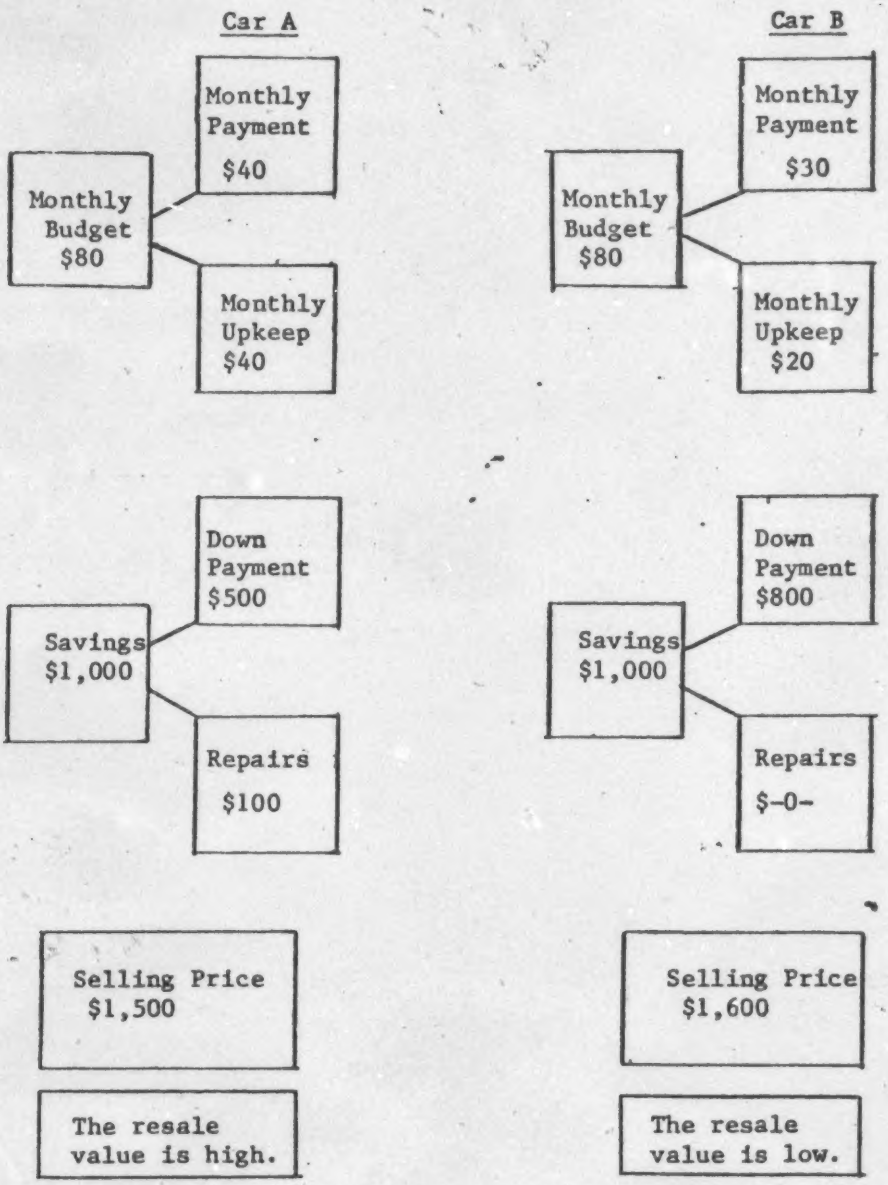
I can buy it; I can afford the repairs and down payment.

I would buy it; it's in perfect condition.

I can buy it; I don't need a fast car.

I won't buy it; it's too slow.

3. Level III



Acceptable

I don't care about resale value.

I would buy Item A because it's cheaper.

I can buy both, but I would buy Item B because I would have extra cash on hand.

I would buy Item B because it needs no repairs.

I would buy Item A, because I would have more savings left for emergencies.

Unacceptable

I would buy Item A because it's selling price is cheaper. (Teacher should point out that Item B is cheaper over the 36 months.)

I would buy Item B because it's on blue file cards.

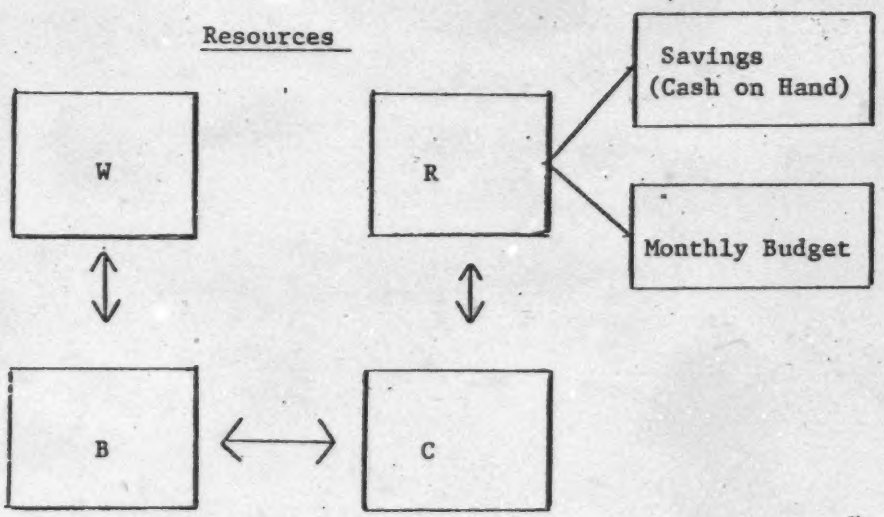
B. DESIGNING CONSUMER DECISION-MAKING PROBLEMS

1. Identify the area of consumer decision-making skills you wish to teach through problem solving.

2. Identify data card categories.

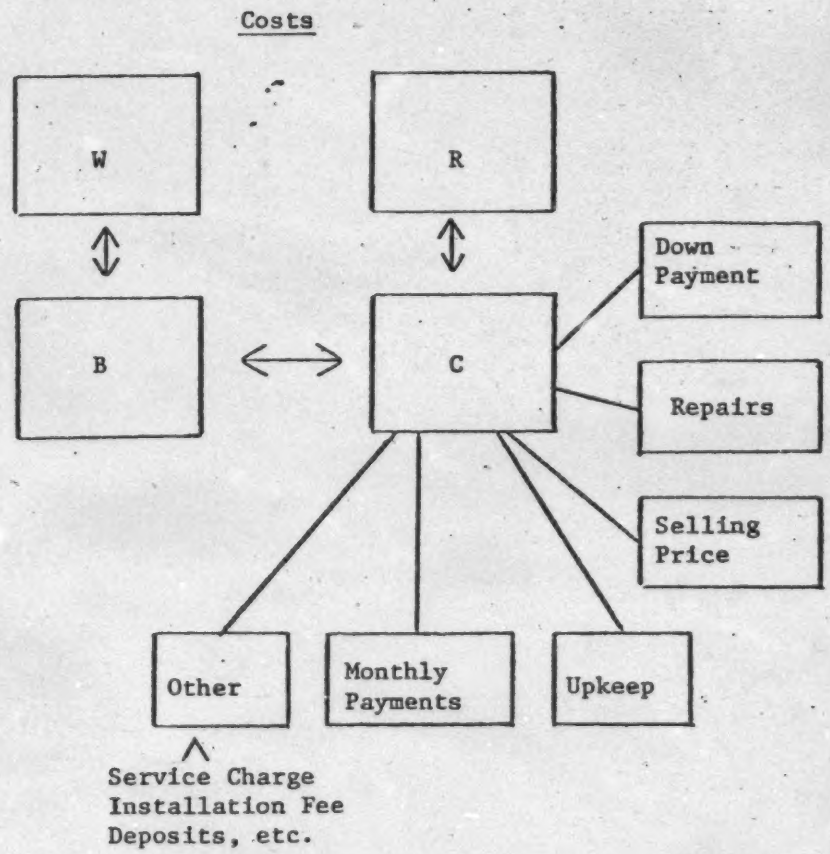
   a. Resource Cards

   Using the Decision-Making Model, start from the box marked "Resources" (R). Select only those personal resource categories appropriate to the problem. "Savings" and "Monthly Budget" are relatively comprehensive categories, yet you may find others relevant to certain situations.



b. Cost Cards

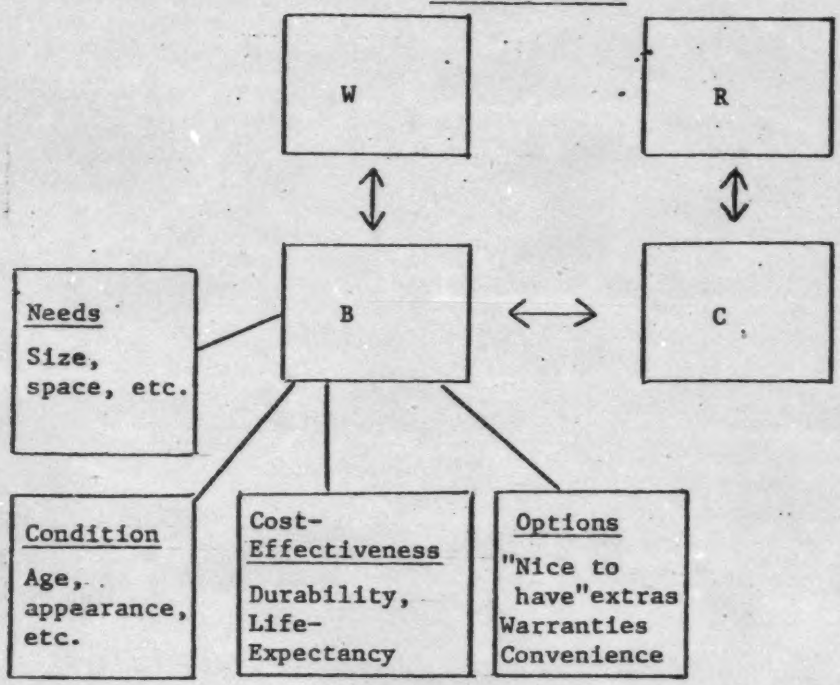
Using the Decision-Making Model, start from the box marked "Costs" (C). Select only those cost areas of the consumer item, initially and over time, critical to the decision to purchase or not to purchase. Most of these categories are listed for you (down payment, installation fee, etc.) Other categories relevant to certain items may also be included at the teacher's discretion.



c. Benefit Cards

Using the Decision-Making Model, start from the box marked "Benefits" (B). Select a set of characteristics of the consumer item which could be regarded as desirable or undesirable. Benefits can be either positive or negative. They influence a student's decision whether or not to consider an item for purchase. These cards should help students clarify their own values. The benefit cards should not have a category heading, as this will confuse the student. A simple sentence stating the benefit is sufficient.

Benefit Cards



3. Make Data Card Decks.

a. Level I

Level I decks are made up by combining resource data cards and cost data cards. Type each cost and resource category on a master sheet. (See Producing Card Sets, page .) Once you have the categories, you can fill in the cards with dollar values of your choice or randomly.

Note: We have found that eight cards or less is optimal for Level I decks. More cards tend to overwhelm students with information, and make problem-solving difficult.

The following is an example from "Purchasing a Refrigerator" problem:

Cost Data Cards	Completed Cards
Down Payment	**Down Payment** The down payment is $70.
List Price	**List Price** The list price is $500.
Maintenance	**Maintenance** Your electricity bill will go up $5.00 per month.
Installation Charge	**Installation Charge** Delivery will cost $10.
Monthly Payment	**Monthly Payment** The monthly payment is $56 a month for 12 months.
Resource Data Cards	
Savings	**Your Savings** You have $150 saved.
Monthly Budget	**Your Monthly Budget** You can budget $62 a month for refrigerator expenses.

From the "Purchasing Refrigerator" problem, benefit cards could include:

	Completed Benefit Cards
Cost Effectiveness	This refrigerator is frost free.
Need	This refrigerator has a large freezer.
Condition	This refrigerator is slightly scratched.
Option	This refrigerator makes ice cubes.
Need	This refrigerator has a small freezer.

It may turn out that when actually purchasing a new refrigerator, a student may not have an installation fee or an increased electricity bill. If he pays cash, he will not have monthly payments or a down payment. However, we feel that these general headings are applicable to the purchase of many items, and that the student may find this frame of reference valuable when considering future purchases.

We are only concerned with the student's ability to make financially correct decisions, comparing the item "costs" with his personal "resources". Any value judgments (Is it a good deal?) should not be inherent in the problem, although they may lead to interesting class discussions.

b. Level II

Level II decks are made up by including all resource and cost data cards (as in Level I) plus three benefit cards.

c. Level III

In Level III, the student must decide which of two consumer items he would prefer to purchase. The items should be the same type (i.e. two cars, two refrigerators, two apartments for rent, etc.) but have different benefits and costs. The student's resources are constant, only one set of resource data cards are required (savings, monthly budget, etc.).

1. Do not add more than three benefit cards to each item, as this may overwhelm the student with information.

2. Make sure that benefit cards assigned to Item A have their countervalue benefit assigned in Item B.

(See next page for example.)

For example:

	Item A	Item B
Down Payment	Down Payment The down payment is $100.	Down Payment The down payment is $50.
List Price	List Price The list price is $400.	List Price The list price is $475.
Maintenance	Maintenance Your electricity bill will go up $5 per month.	Maintenance Your electricity bill will go up $10 per month.
Installation Charge	Installation Charge Delivery will cost $10.	Installation Charge Delivery will cost $10.
Monthly Payment	Monthly Payment The monthly payment is $25 a month for 12 months.	Monthly Payment The monthly payment is $40 a month for 12 months.
Benefits	This refrigerator has a large freezer.	This refrigerator has a small freezer.
	This refrigerator is slightly scratched.	This refrigerator is in perfect condition.
	This refrigerator must be defrosted.	This refrigerator is frost free.

d. Level IV (See also: Directions for Implementing and Operating the Decision-Making Model)

This level should be a simulated everyday encounter in which the student is asked to recall and practice what he has learned in Levels I - III.

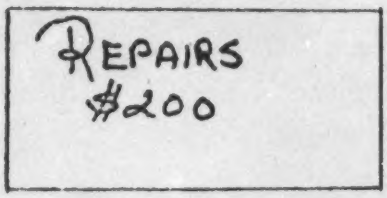
In this level, two people are required to play roles: a buyer and a seller. The object is to enact a situation in which the buyer obtains information from the seller by asking for specific categories of data about the item for sale. The buyer receives information about his resources ("Savings", "Monthly Budget"), but must ask for and record on file cards all cost/benefit information needed to make the decision. The seller improvises answers to the buyer's questions. The buyer then makes the decision whether or not to purchase and tells why. The class reviews the decision.

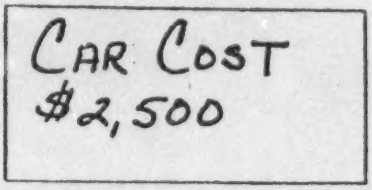
Materials:

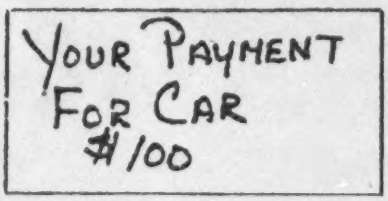
(1) Present "Buyer" with resource cards ("Savings", "Monthly Budget")

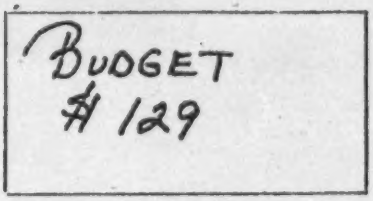
(2) Present "Buyer" with blank file cards to record his information on.

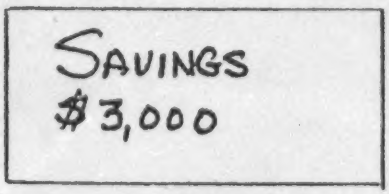
All cards designed that include all categories of information are acceptable. This is an acceptable student-produced deck of cards from the "Used Car" problem.

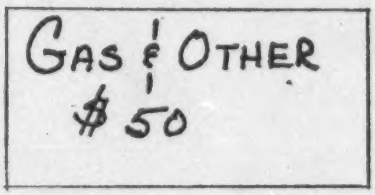


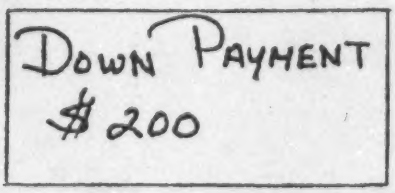


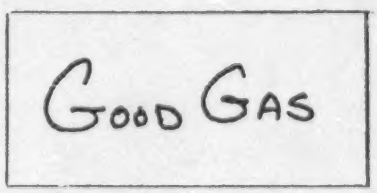












PRODUCING CARD SETS

Once you have the basic cost/resource and benefits cards completed, you can begin producing card sets for any number of students. We have found the most cost-effective strategy is the following:

1. Type the Resource, Cost and Benefit categories on a mater. These categories shluld be typed and lined up for cutting into individual cards.

2. Leave the actual dollar values blank on the master. They will be filled in once you have made the copies.

3. Run off the necessary amount of copies on your copying machine. Use heavy paper if possible, so that the cards will be more durable and easier for students to manipulate.

4. Cut the duplicated sheets into individual cards.

5. Put together your decks for each level.

6. Fill in the dollar values you want . We suggest that they be within a reasonably realistic range.

Note: For Level III, two items are being considered for purchase. The cost/benefit cards should be on two different colors of paper. The Resource cards included in this level should always be white.

C. DIRECTIONS FOR IMPLEMENTING AND OPERATING THE DECISION-MAKING MODEL

Level I

A. Present each student with a Level I card deck.

B. (Optional)

Record the deck's code number (from back of the deck) on a record sheet by the student's name. This will prevent duplication of effort by students. (See Record Sheet, page .)

C. Point out that the deck contains information on:

1. Student's resources (cards labeled: "Your Savings", "Your Monthly Budget")

2. The terms of the sale and other costs of the item (needed repairs, down payment, monthly payment, etc.)

D. Tell the student this is an item he likes, or is interested in.

E. Pose the question: "Can you afford to _____?" (buy this car, rent this apartment, etc.) (Given the cost of the item and the money you have, as stated on the cards.)

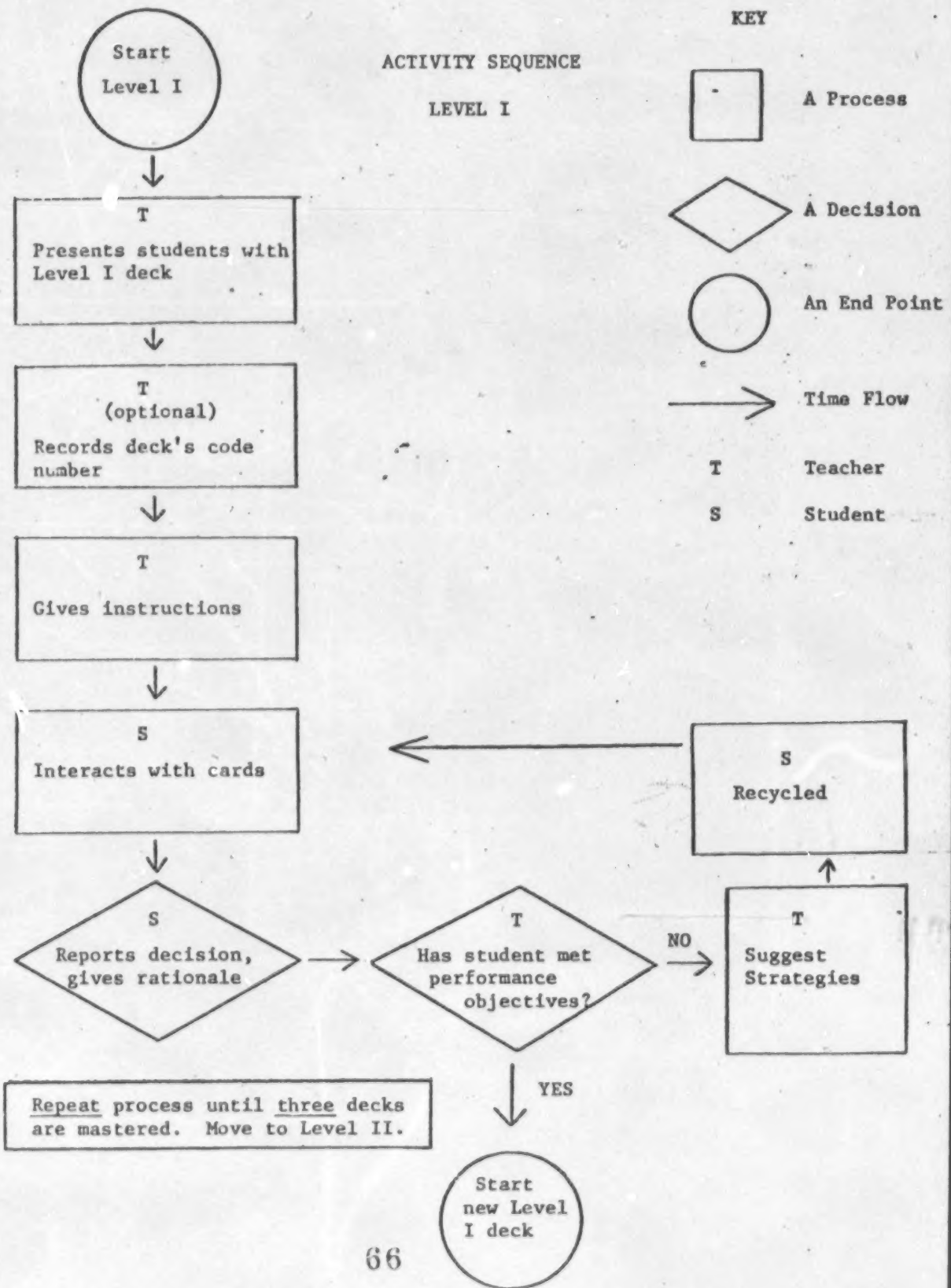
F. When a student answers the above question, have him give you his rationale.

G. Review the Performance Objective Checksheet to see that all Level I objectives are mastered.

H. If not, point out helpful strategies, but do not provide answers.

I. Have students try again with the same deck until Level I performance objectives are mastered.

J. Students should progress to Level II decks only after they have mastered three Level I decks, as defined by Performance Objective Checksheet.


ACTIVITY SEQUENCE
LEVEL I
Start Level I
T
Presents students with Level I deck
T
(optional)
Records deck's code number
T
Gives instructions
S
Interacts with cards
S
Reports decision, gives rationale
T
Has student met performance objectives?
NO
T
Suggest Strategies
S
Recycled
YES
Repeat process until three decks are mastered. Move to Level II.
Start new Level I deck
KEY
A Process
A Decision
An End Point
Time Flow
T Teacher
S Student

Level II

A. Present students with a Level II card deck.

B. (Optional)

Record the deck's code number on a record sheet by the student's name.

C. Instruct the students not to look at the cards.

D. Have students place cards face down on the table so that code numbers show.

E. Have students turn over all but five cards.

F. Tell students that the five extra cards should remain face down. Students should not look at them.

G. Tell students this is an item they are interested in.

H. Pose the question: "Using the face-up cards, do you have enough information to determine if you can afford to buy?".

I. If the student does not have enough information, have him answer the above question and give the rationale.

J. Review the Performance Objective Checksheet to see that Level II objectives A and B are mastered. If not, point out helpful strategies, but do not provide answers.

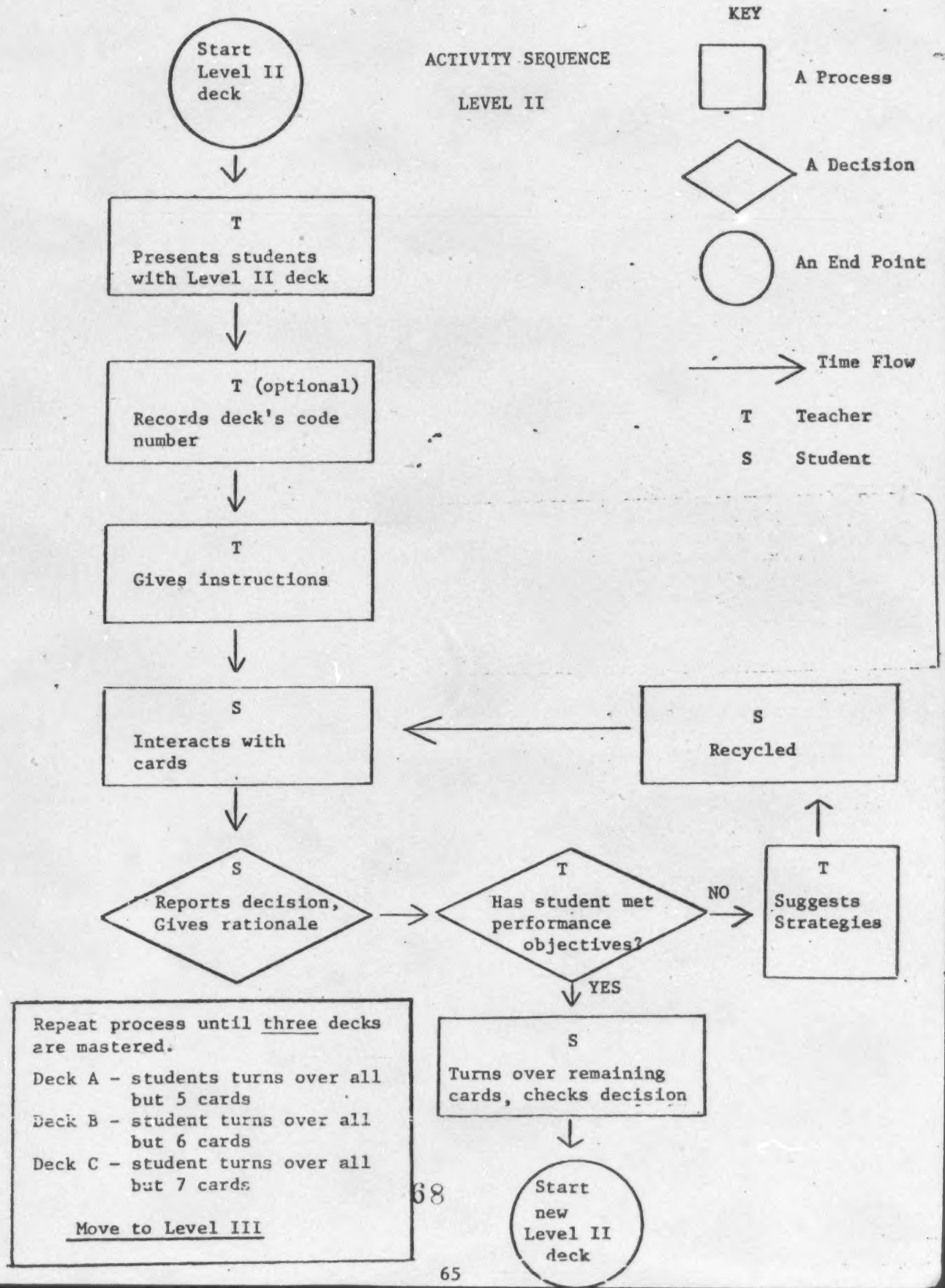
K. When Performance Objectives A and B are mastered, have the student turn over the remaining cards.

L. If the studens does have enough information, pose the question: "Can you afford to buy _____?", and have him give the rationale. Review Performance Objective Checksheet to see that Level III objectives C and D are mastered.

M. When students have mastered all Level II Performance Objectives, present students with a new Level II deck.

N. This time have them turn over all but six cards, then follow the same instructions. Next try another deck, turning over all but seven cards, and following the same instructions as before.

O. Students should progress to Level III decks only after they have mastered three Level II decks, as defined by the Performance Objective Checksheet.


KEY
ACTIVITY SEQUENCE
LEVEL II
A Process
A Decision
An End Point
Time Flow
T Teacher
S Student
Start Level II deck
T
Presents students with Level II deck
T (optional)
Records deck's code number
T
Gives instructions
S
Interacts with cards
S
Recycled
S
Reports decision, Gives rationale
T
Has student met performance objectives?
NO
T
Suggests Strategies
YES
S
Turns over remaining cards, checks decision
Repeat process until three decks are mastered.
Deck A - students turns over all but 5 cards
Deck B - student turns over all but 6 cards
Deck C - student turns over all but 7 cards
Move to Level III
Start new Level II deck

Level III

A. Present each student with a Level III card deck.

B. Record the deck code number on a record sheet by the student's name.

C. Tell the student that the white cards represent his financial status.

D. Point out that the yellow cards represent Item A, the blue cards represent Item B.

E. Tell the student he is interested in both items.

F. Pose the question: "Which item would you _____(buy, rent, etc.)?".

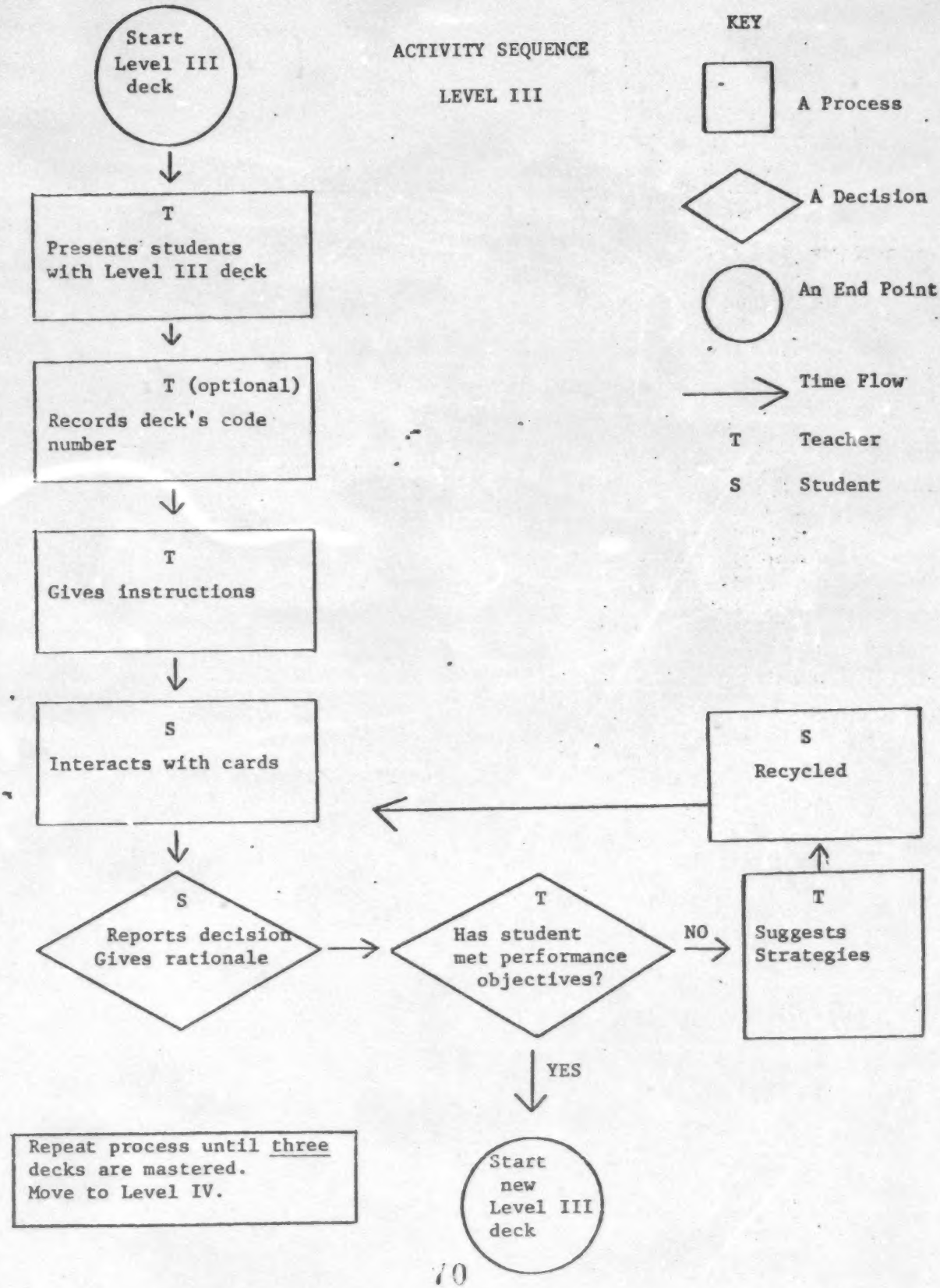
G. When a student answers the above question, have him give you his rationale.

H. Review the Performance Objective Checksheet to see that all Level III objectives are mastered.

I. If not, point out helpful strategies, but do not provide answers.

J. Have students try again with the same deck until Level III Performance Objectives are mastered.

K. Students should progress to Level IV decks only after they have mastered three Level II decks, as defined by Performance Objective Checksheet.


ACTIVITY SEQUENCE
LEVEL III
KEY
A Process
A Decision
An End Point
Time Flow
T Teacher
S Student
Start Level III deck
T
Presents students with Level III deck
T (optional)
Records deck's code number
T
Gives instructions
S
Interacts with cards
S
Reports decision Gives rationale
T
Has student met performance objectives?
NO
T
Suggests Strategies
S
Recycled
YES
Repeat process until three decks are mastered. Move to Level IV.
Start new Level III deck

Level IV

A. Tell the students that this problem requires two people to play roles; a buyer and a seller. The object is to enact a situation in which the buyer obtains information from the seller by asking for specific categories of data. The buyer must then make a decision whether or not to buy, based on the information he has acquired.

B. Have the students select a partner, and decide who will role-play the buyer and the seller.

Instructions for the Buyer

1. Present the buyer with resource data cards ("Savings" and "Monthly Budget")

2. Tell the buyer he is calling the seller about an item he is interested in. (Perhaps he read a "for sale" advertisement in newspaper.)

3. Tell the buyer he can ask the seller any questions about the item for sale. The seller will give him only the information he asks for.

4. Present the buyer with blank file cards. Tell the buyer to record the information he gets on these cards.

5. Tell the buyer he decides when to terminate the interview.

6. Tell the buyer he must decide whether or not to buy from the information he receives. As in previous problems, the buyer will explain his decision.

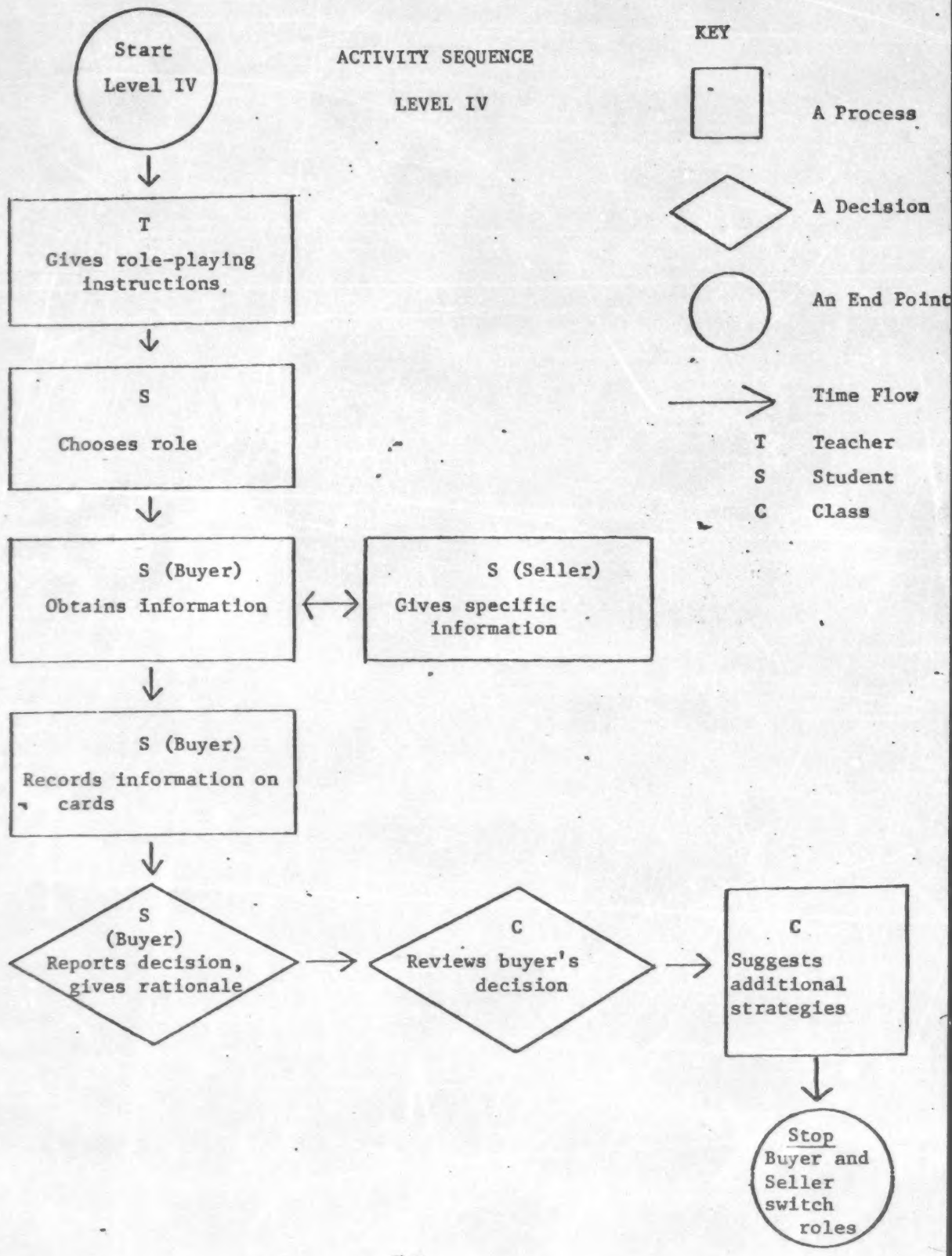
Instructions for the Seller

1. Tell the seller that the buyer has the information on his personal resources.

2. Tell the seller he should answer only direct questions about the costs or benefits of the sale item.

3. Tell the seller to improvise answers to the buyer's questions. The answers should be as realistic as possible.

C. Allow time for class discussion of the buyer's decision.


Start
Level IV
ACTIVITY SEQUENCE
LEVEL IV
KEY
A Process
A Decision
An End Point
Time Flow
T Teacher
S Student
C Class
T
Gives role-playing instructions.
S
Chooses role
S (Buyer)
Obtains Information
S (Seller)
Gives specific information
S (Buyer)
Records information on cards
S
(Buyer)
Reports decision, gives rationale
C
Reviews buyer's decision
C
Suggests additional strategies
Stop
Buyer and Seller switch roles

Record Sheet

Letters and numbers refer to decks.

Student	Level I	Level II	Level III
Joe Sims	A, B, C	A, D, E	A, J, C
Jack Scott	C, D, E	F, E, G	B, E, D
Shirley Jones	C, F, A	B, C, H	D, C, G
etc.			
	Student must master 3 decks. No sequence necessary.	Student must master 3 decks. No sequence necessary.	Student must master 3 decks. No sequence necessary.

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1. This sheet keeps a record of the decks a student has completed, thereby preventing a student from using the same deck twice.

2. It is also useful as a student "progress" index for the teacher.